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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,291

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Daniel F. Hall

47080-00047USPT

3663

30223

7590

01/10/2008

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EXAMINER

THOMAS, BRANDI N

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

01/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/626,291

Applicant(s)

HALL ET AL.

Examiner

Brandi N. Thomas

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 9 is/are rejected.
- 7) ☒ Claim(s) 5, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☒ Other: Detailed Action.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title; if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al. (4621006) in view of Hodge (5039043).

Regarding claims 1 and 3, Terry et al. discloses, in figure 1, a cast bench (10) for holding laser components (col. 5, lines 1-11) comprising: a base (12) having a top surface (col. 4, lines 55-57) but does not specifically disclose a plurality of optical component supports cast with and integral with said base and extending from said top surface, said optical component supports being positioned to support optical components. Hodge discloses, in figures 1-4, a plurality of optical component supports ((30 and 32) and extending from said top surface (col. 3, lines 25-28), said optical component supports (30 and 32) being positioned to support optical components (col. 3, lines 25-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention to include the supports cast with and integral with said base, since it has been that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art (Howard v. Detroit Stove

Works, 150 U.S. 164 (1893). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention to include the supports cast with and integral with said base for the purpose of eliminating the loss of additional components.

Regarding claim 2, Terry et al. discloses, in figure 1, a cast bench (10) for holding laser components (col. 5, lines 1-11) but does not specifically disclose wherein said optical component supports are provided in a plurality of heights, in a plurality of widths, and in a plurality of areas throughout said top surface of said base. Hodge discloses wherein said optical component supports are provided in a plurality of heights, in a plurality of widths, and in a plurality of areas throughout said top surface of said base (col. 1, lines 38-43).

Regarding claim 6, Terry et al. discloses, in figure 1, a cast bench (10) for holding laser components (col. 5, lines 1-11) but does not specifically disclose wherein at least two of said optical component supports are sized and positioned to act in concert to hold a single optical component. Hodge discloses the supports (30 and 32) hold optical components (col. 3, lines 25-28) but does not specifically disclose wherein two optical component supports are sized and positioned to act in concert to hold a single optical component. It would have been obvious to one having ordinary skill in the art at the time of the invention to use to support to hold a single optical component for the purpose of aligning and gripping an optical component.

Regarding claim 9, Terry et al. discloses, in figure 1, a cast bench (10) for holding laser components (col. 5, lines 1-11) but does not specifically disclose wherein a plurality of said optical component supports are provided with threaded holes therein for accepting optical components or intermediate optical component mounts. Hodge discloses wherein a plurality of said optical component supports are provided with threaded holes (56) therein for accepting

optical components or intermediate optical component mounts (col. 4, lines 13-15). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the device of Terry et al. with the supports of Hodge for the purpose of the placement and alignment of optical components (col. 4, lines 13-15).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al. (4621006) in view of Hodge (5039043) as applied to claim 1 above, and further in view of Willis (6771437 B1).

Regarding claim 4, Terry et al. and Hodge disclose the claimed invention but does not specifically disclose a kinematic mount area provided in said top surface of said base, said kinematic mount area comprising a kinematic mount cone, a kinematic mount groove, and a kinematic mount flat surface. Willis discloses, in figures 2a and 2b, a kinematic mount area provided in said top surface of said base (210), said kinematic mount area comprising a kinematic mount cone (215), a kinematic mount groove (215a), and a kinematic mount flat surface (x and z mounting pads) (col. 6, lines 4-13). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Terry et al. and Hodge with the kinematic mount of Willis for the purpose of constraining the optical bench (col. 2, lines 7-14).

***Allowable Subject Matter***

5. Claims 18-20 are allowed.

6. Claims 5, 7, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 7, 18, and 19, wherein the claimed invention comprises, in claim 7, at least one aperture cast into said bench being adapted to accept conduits therethrough for connection to components mounted on said bench; in claim 18, support struts spaced beneath said cast base to form a first region and a second region of said cast bench, said first region support struts spaced more closely together than the support struts of said second region; in claim 19, a main oscillator mounted on said kinematic mount components and a gain module mounted on said base at said second region, as claimed.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-9 and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on Monday - Thursday from 6-4:30.

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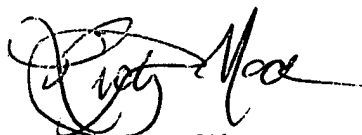
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brandi N Thomas  
Examiner  
Art Unit 2873



BNT  
January 9, 2008



RICKY MACK  
SUPERVISORY PATENT EXAMINER